



Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 9111 (1979): Glossary of terms and classification pertaining to transport packaging [TED 24: Transport Packages]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



PROTECTED BY COPYRIGHT

IS:9111 - 1979

Indian Standard

**GLOSSARY OF TERMS AND CLASSIFICATION
PERTAINING TO TRANSPORT PACKAGING**

UDC 621.798.017:001.4



© Copyright 1979

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Price Rs 5.00 Gr 4

September 1979

Indian Standard

GLOSSARY OF TERMS AND CLASSIFICATION PERTAINING TO TRANSPORT PACKAGING

Transport Packages Sectional Committee, MCPD 18

Chairman

PROF R. K. CHOWDHARY

Representing

Indian Institute of Packaging, Bombay

Members

SHRI P. H. CHAVAN } (*Alternates to Prof R. K. Chowdhary*)
SHRI P. V. NARAYANAN }

SHRI V. ANAND

Ministry of Railways

SHRI B. M. CHOPRA (Alternate)

Export Inspection Council of India, Calcutta

SHRI D. P. BHATTACHERJEE

Indian Posts & Telegraphs Department, New Delhi
Directorate General of Health Services (Ministry of Health), New Delhi

SHRI A. JHA

India Tobacco Company Ltd, Calcutta

SHRI P. C. KAPUR

Ministry of Shipping and Transport (Transport Wing)

SHRI S. K. KESHAVA

Department of Explosives, Nagpur

SHRI M. KOTEESWARAN

Air India, Bombay

SHRI I. N. MURTY

Bayer India Limited, Bombay

SHRI NARPAT SINGH

SHRI R. TEWARI (Alternate)

Sarabhai Chemicals Ltd, Vadodara

DR S. Y. PANDIT

Directorate of Standardization (Ministry of Defence), New Delhi

DR P. V. RAIKAR (Alternate)

All Indian Shippers' Council, New Delhi

SHRI M. R. PARANJAPE

Directorate General of Factory Advice Service & Labour Institute, Bombay

DR N. P. RAO

Forest Research Institute & Colleges, Dehra Dun
Indian National Shipowners' Association, Bombay

SHRI RAVI BHUSHAN

The Calcutta Port Trust, Calcutta

SHRI K. C. SAXENA

Central Food Technological Research Institute (CSIR), Mysore

SHRI N. K. SHUKLA

Alternate The Shipping Corporation of India Ltd, Bombay

CAPT N. A. TAMHANE

Director General, ISI (*Ex-officio Member*)

SHRI B. A. TIKKU

Secretary

SHRI P. VEERRAJU

SHRI S. CAPOOR

SHRI A. R. VIJAYENDRA RAO

Deputy Director (MCPD), ISI

© Copyright 1979

INDIAN STANDARDS INSTITUTION

This publication is protected under the *Indian Copyright Act (XIV of 1957)* and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

Indian Standard

GLOSSARY OF TERMS AND CLASSIFICATION PERTAINING TO TRANSPORT PACKAGING

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 31 January 1979, after the draft finalized by the Transport Packages Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.

0.2 The main functions of packaging are to contain, to protect and to communicate. The operation unifies the package and its contents. Since the packaging function has come to occupy a very important place in the overall function of making goods produced available to the consumer in proper form, it is essential that the various terms connected with this function are defined without any ambiguity.

0.3 The classification and the numerical system of identification are recommended to facilitate computer application and hence information retrieved by the designer, cost analyst, etc, in complex systems without getting bogged down by ambiguous nomenclatures.

1. SCOPE

1.1 This standard explains the general terms connected with transport packaging, and the classification of packages based on a logical numerical system to avoid the subjective character of long-established designations.

2. TERMINOLOGY

2.1 Packaging — Operation to unify the package and its contents.

2.2 Package/Means of Packaging — Serves to contain, protect, preserve and keep intact, the contents during handling, transportation, storage and distribution. It also facilitates the operations and its disposal does not contribute to endanger environment.

2.2.1 The other important function it performs is to communicate the identity of its contents, instructions for use, manufacturing details, storage conditions and other related or statutory data.

2.3 Contents — Goods or products packaged or to be packaged.

2.4 Means of Packaging — see 2.2.

2.5 Auxiliary Means of Packaging — The means or materials used, together with means of packaging, for packaging. (For example: for fixing, fastening, identifying, strengthening, gripping or holding, and cushioning.)

2.6 Packaging Material — Any material used for the production of means of packaging and auxiliary means of packaging.

3. CLASSIFICATION

3.0 The classification of packages shall be based on the following characteristics:

- a) Kinds of the package;
- b) The material;
- c) The design features and size;
- d) The aptitude for usage; and
- e) The model.

3.0.1 The classification and the characteristics are illustrated in Appendix A.

3.1 Kinds of Package

3.1.1 Wrapper — A sheet of flexible material used for wrapping purposes. Identified by the digit 01.

3.1.2 Bag — Bag is a preformed container made of flexible material enclosed on all sides, except the one which forms an opening. Identified with the digit 02.

3.1.2.1 Sack — Sack is a heavy duty bag.

3.1.3 Box — Rigid means of packaging usually in the shape of a parallelopiped. Identified with the digit 03.

3.1.4 Can — Rigid means of packaging of small capacity of various shapes having neither a mouth-piece nor a neck. Identified with the digit 04.

3.1.5 Barrel — A round bulging vessel of greater length than breadth, usually made of metals and has flat ends of equal diameter. Identified by the digit 05.

3.1.6 Drum — A straight sided, normally cylindrical container of metal, plywood or fibre board or plastic. Identified by the digit 06.

3.1.7 Canister — A rigid means of packaging with flat or bulged having an opening without neck. Identified with the digit 07.

3.1.8 Bottle — A rigid means of packaging having a neck and an opening which provides for the locking device. Identified with the digit 08.

3.1.9 Crates — A rigid shipping container of framed construction joined together with nails, bolts or any equivalent method of fastening. The framework may or may not be enclosed with sheathing. Identified by the digit 09.

3.2 Material — The second stage of classification shall be based on the material used to constitute the body (or the principal part) of the package, digital designations ranging from 01 to 99.

3.3 Design Feature and Size — The third stage of classification shall indicate the sub-classification of family. Two digits shall designate this stage.

3.3.1 Wrapper

- a) Flat (01),
- b) Rolled (02), and
- c) Prefabricated (sheet) (03).

3.3.2 Sack or Bag

- a) Sack (01),
- b) Multi-ply sack (02),
- c) Reinforced sack (03),
- d) Bag (04),
- e) Net sack (05), and
- f) Woven sack (06).

3.3.3 Box

- a) Box (01),
- b) Tub (02),
- c) Crate (03),
- d) Tote box (04),
- e) Basket (hamper) (05), and
- f) Harasse (06).

3.3.4 Can

- a) Cylindrical can (01),
- b) Square can (02),
- c) Oval can (03),
- d) Trapezoidal can (04),
- e) Conical can (05),
- f) Truncated conical can (06),
- g) Trigonal can (07),
- h) Half cylindrical can (08),
- j) Cup (09),
- k) Mandolin can (10), and
- m) Rectangular can (11).

3.3.5 Barrel

- a) Cylindrical barrel (01),
- b) Truncated conical pail (02), and
- c) Heavy barrel (03).

3.3.6 Drum

- a) Cylindrical light drum (01),
- b) Heavy drum (02), and
- c) Cylindrical pail (03).

3.3.7 Canister

- a) Cylindrical canister (01),
- b) Square canister (02),
- c) Oval canister (03),
- d) Truncated pyramidal canister (04),
- e) Jerrycan (05), and
- f) Carrier can (06).

3.3.8 Bottle

- a) Cylindrical bottle (01),
- b) Oval bottle (02),
- c) Conical bottle (03),
- d) Polygonal bottle (04),

- e) Irregular bottle (05),
- f) Wicker bottle (06),
- g) Square bottle (07), and
- h) Rectangular bottle (08).

3.4 Aptitude for Usage — For each kind of package a further classification is made according to usage, manufacturing features, means of closing, auxiliary means, range of capacity, hermetic features and tightness with a digital designation range of 01-99.

3.5 Model — The last stage of classification shall pertain to identification of package according to technical specification, dimensional features, tolerances and the quality of material in the overall context of the package performance.

4. EXAMPLE

4.1 A package with the following designation:

08 50 01 AA BB

would indicate a bottle (08)

made of glass (50),

cylindrical (01).

AA shall be replaced by two digits depending upon aptitude for usage (as specified in 3.4) and *BB* by two digits indicating technical specification (*see* 3.5).

APPENDIX A

(Clause 3.0.1)

CLASSIFICATION OF PACKAGES BY THEIR CHARACTERISTICS

General Shape — Rigidity — Volume — Opening										
KIND OF PACKAGE 01 — 09	Wrapper 01	Bag, sack 02	Box 03	Can 04	Barrel 05	Drum 06	Canister 07	Bottle 08	Crate 09	
Category of Material of the Packaging Body										
MATERIAL 01 — 99	Steel 01	Tinplate or black-plate 02	Aluminium-light metal alloy 03	Copper 04	Lead 05	Tin 06	Zinc 07	Timber 10	Sliced wood or cut wood 11	Lathwood 12
	Agglomerated wood, fibres and particles 13	Plywood 14	Wood for basket ware 15	Thermoplast 20	Thermoset plastics 21	Elastomere 22	Papers 30	Corrugated board 31	Board or strong board 32	Natural textiles 40
	Artificial textiles 41	Glass 50	Pottery 60	Combined materials 90	Other materials 99					
Differentiation by Shape or Design										
FAMILY	01	Flat foil	Rolled foil	Prefabricated foil (sheet)						
	02	Sack (one ply)	Multi-ply sack	Reinforced sack	Pouch, bag	Net sack	Woven sack			
	03	Box	Tub	Crate	Tray	Basket (hamper)	Harasse			
	04	Cylindrical can, box	Square can, box	Oval can, box	Trapezoidal can	Truncated conical can	Truncated pyramidal can	Trigonal box	Half cylindrical box	Cup
	06	Cylindrical keg	Cylindrical pail	Truncated conical pail	Cylindrical light drum	Heavy keg	Heavy weight barrel	Drum		
	07	Cylindrical canister	Square canister	Oval canister	Truncated pyramidal canister	Jerrycan	Carrier can			
	08	Cylindrical bottle	Oval bottle	Conical bottle	Polygonal bottle	Irregular bottle	Wicker bottle	Square bottle	Rectangular bottle	
TYPE 01 — 99	Determined by: usability — characteristics of fabrication — closure system — accessories — capacity — hermetical tightness — waterproofness									
MODEL	Technical specification — dimensional characteristics — tolerances — quality of material									